

SEQUENCE LISTING

(1) GENERAL INFORMATION:

5 (2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH:

(B) TYPE: nucleic acid

(C) STRANDEDNESS: single

10 (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA (oligonucleotide)

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

15 FR-patched RFB4

VH:

Full length cDNA sequence (SEQ ID no. 1):

20 GAAGTGCAGCTGCTGGAGTCTGGGGGAGGCTTAGTGCAGCCTGGA
GGGTCCCTGAGGCTCTCCTGTGCAGCCTCTGGATTCTCCTTCAGTAT
CTATGACATGTCTTGGGTTCGCCAGGCACCGGGAAAGGGGCTGGA
GTGGGTCGCATACATTAGTAGTGGTGGTGGTACCACCTACTATCCA
GACACTGTGAAGGGCCGATTACCATCTCCAGAGACAATGCCAAG
25 AACTCCCTGTACCTGCAAATGAACAGTCTGAGGGTGGAGGACACA
GCCTTATATTACTGTGCAAGACATAGTGGCTACGGTAGTAGCTACG
GGGTTTGTGTTGCTTACTGGGGCCAAGGGACTCTGGTCACTGTCTCT
TCA

Full length amino acid sequence (SEQ ID no. 2):

30 EVQLLESGGGLVQPGGSLRLSCAASGFSFSIYDMSWVRQAPGKGLEW
VAYISSGGGTYYPDTVKGRFTISRDNAKNSLYLQMNSLRVEDTALYY
CARHSGYGSSYGVLFAFWGQGTLVTVSS

N-terminal sense strand template DNA sequence (SEQ ID no. 3):

35 CCTGGAGGGTCCCTGAGGCTCTCCTGTGCAGCCTCTGGATTCTCCTT
CAGTATCTATGACATGTCTTGGGTTCGCCAGGCACCGGGAAAGGGG
CTGGAGTGGGTCGCATAC

5' Primer for N-template (SEQ ID no. 4)

40 GAAGTGCAGCTGCTGGAGTCTGGGGGAGGCTTAGTGCAGCCTGGA
GGGTCCCTGAGG

3' Primer for N-template (SEQ ID no. 5)

45 GTAGGTGGTACCACCACCACTACTAATGTATGCGACCCACTCCAGC
CC

C-terminal sense strand template DNA sequence (SEQ ID no. 6):

TTCACCATCTCCAGAGACAATGCCAAGAACTCCCTGTACCTGCAAA
TGAACAGTCTGAGGGTGGAGGACACAGCCTTATATTACTGTGCAAG
ACATAGTGGCTACGGTAGTAGCTACGGGGTTTTGTTTGCT

5 5' Primer for C-template (SEQ ID no. 7)
GGTGGTACCACCTACTATCCAGACACTGTGAAGGGCCGATTCACCA
TCTCCAGAGACAAT

10 3' Primer for C-template (SEQ ID no. 8)
TGAAGAGACAGTGACCAGAGTCCCTTGGCCCCAGTAAGCAAACAA
AACCCCGTAGCT

Joining site: KpnI

15 VK:

Full length cDNA sequence (SEQ ID no. 9)
GATATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCCTCTGTGGG
AGACAGAGTCACCATTAGTTGCAGGGCAAGTCAGGACATTAGCAA
20 TTATTTAAACTGGTATCAGCAGAAACCAGGTAAGGCTCCGAAACTC
CTGATCTACTACACTAGTATATTACACTCAGGAGTCCCATCAAGGT
TCAGTGGCAGTGGGTCTGGAACAGAATTTACTCTCACCATTAGCTC
CCTGCAGCCAGAAGATTTTGCCACTTACTTTTGCCAACAGGGTAAT
ACGCTTCCGTGGACGTTCCGTGGAGGCACCAAGGTGGAAATCAAA

25 Full length amino acid sequence (SEQ ID no. 10)
DIQMTQSPSSLSASVGDRVTISCRASQDISNYLNWYQQKPGKAPKLLIY
YTSILHSGVPSRFSGSGSGTEFTLTISLQPEDFATYFCQQGNTLPWTFG
GGTKVEIK

30 N-terminal sense strand template DNA sequence (SEQ ID no. 11)
CTGTCTGCCTCTGTGGGAGACAGAGTCACCATTAGTTGCAGGGCAA
GTCAGGACATTAGCAATTATTTAAACTGGTATCAGCAGAAACCAGG
TAAGGCTCCGAAACTC

35 5' Primer for N template (SEQ ID no. 12)
GATATCCAGATGACCCAGTCTCCATCCTCCCTGTCTGCCTCTGTGGG
AGAC

40 3' Primer for N-template (SEQ ID no. 13)
ATATACTAGTGTAGTAGATCAGGAGTTTCGGAGCCTTACC

C-terminal sense strand template DNA sequence (SEQ ID no. 14)
CCATCAAGGTTCAAGTGGCAGTGGGTCTGGAACAGAATTTACTCTCA
45 CCATTAGCTCCCTGCAGCCAGAAGATTTTGCCACTTACTTTTGCCAA
CAGGGTAATACGCTTCCGTGGACGTTT

5' Primer for C-template (SEQ ID no. 15)
CTACACTAGTATATTACACTCAGGAGTCCCATCAAGGTTCAAGTGGC
50 AGT

3' Primer for C-template (SEQ ID no. 16)
TTTGATTTCACCTTGGTGCCTCCACCGAACGTCCACGGAAGCGTA
TT

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Joining site: SpeI A^VCTAG_ΔT

FR-Patched chimeric 1F5

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VH:

Full length cDNA sequence (SEQ ID no. 17):
CAGGTGCAACTGGTGGCTTCCGGGGCTGAGGTAAATAAGCCTGGG
15 GCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGCTACACATTTACCA
GTTACAATATGCACTGGGTACGGCAGCCTCCTGGAAGGGGCCTGGA
ATGGATTGGAGCTATTTATCCAGGAAATGGTGATACTAGTTACAAT
CAGAAATTCAAGGGCAAGGCCACATTGACTGCAGACAAATCCTCC
AGCACAGCCTACATGCAGCTCAGCAGTCTGACATCTGAGGACTCTG
20 CGGTCTATTACTGTGCAAGATCGCACTACGGTAGTAACCTACGTAGA
CTACTTTGACTACTGGGGCCAAGGCACCACTGTTACAGTCTCCTCT
GATCA

Full-length amino acid sequence (SEQ ID no. 18):
25 QVQLVASGAEVNKPASVKVSKASGYTFTSYNMHWVRQPPGRGLE
WIGAIYPNGDTSYNQKFKGKATLTADKSSSTAYMQLSSLTSEDSAVY
YCARSHYGSNYVDYFDYWGQGTTVTVSSD

30 N-terminal sense strand template DNA sequence (SEQ ID no. 19):
AATAAGCCTGGGGCCTCAGTGAAGGTCTCCTGCAAGGCTTCTGGCT
ACACATTTACCAGTTACAATATGCACTGGGTACGGCAGCCTCCTGG
AAGGGGCCTGGAATGGATTGGA

35 5' Primer for N-template (SEQ ID no. 20)
CAGGTGCAACTGGTGGCTTCCGGGGCTGAGGTAAATAAGCCTGGG
GCCTCAGTGAAG

40 3' Primer for N-template (SEQ ID no. 21)
TGTAACTAGTATCACCATTTCTGGATAAATAGCTCCAATCCATTCC
AGGCCCCCT

C-terminal sense strand template DNA sequence (SEQ ID no. 22):
45 TTGACTGCAGACAAATCCTCCAGCACAGCCTACATGCAGCTCAGCA
GTCTGACATCTGAGGACTCTGCGGTCTATTACTGTGCAAGATCGCA
CTACGGTAGTAACCTACGTAGACTACTTTGACTAC

5' Primer for C-template (SEQ ID no. 23)
50 TGATACTAGTTACAATCAGAAATTCAAGGGCAAGGCCACATTGACT
GCAGACAAATCCTCC

3' Primer for C-template (SEQ ID no. 24)
TGATCAGAGGAGACTGTAACAGTGGTGCCTTGGCCCCAGTAGTCAA
AGTAGTCTACGTA

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Joining site: SpeI

VK:

10 Full-length cDNA sequence (SEQ ID no. 25):
GATATTCAACTCACACAGTCTCCATCAAGTCTTTCTGCATCTGTGGG
GGACAGAGTCACAATTACTTGCAGGGCCAGCTCAAGTTTAAGTTTC
ATGCACTGGTACCAGCAGAAGCCAGGATCCTCCCCCAAACCCTGGA
TTTATGCCACATCCAACCTGGCTTCCGGAGTCCCTAGTCGCTTCAGT
15 GGCAGTGGGTCTGGGACCGAGTTCACTCTCACAATCAGCAGTTTGC
AGCCTGAAGATTTTCGCCACTTATTTCTGCCATCAGTGGAGTAGTAA
CCCGCTCACGTTCGGTGCTGGGACCAAGCTGACCGTTCTACGG

20 Full-length amino acid sequence (SEQ ID no. 26):
DIQLTQSPSSLSASVGDRTTITCRASSLSFMHWYQQKPGSSPKPWIYA
TSNLASGVPSRFSGSGSGTEFTLTISLQPEDFATYFCHQWSSNPLTFGA
GTKLTVLR

25 N-terminal sense strand template DNA sequence (SEQ ID no. 27):
TCAAGTCTTTCTGCATCTGTGGGGGACAGAGTCACAATTACTTGCA
GGGCCAGCTCAAGTTTAAGTTTCATGCACTGGTACCAGCAGAAGCC
AGGATCCTCCCCCAAACCCTGGATTTATGCCACATCC

30 5' Primer for N-template (SEQ ID no. 28):
GATATTCAACTCACACAGTCTCCATCAAGTCTTTCTGCATCTGTG

3' Primer for N-template (SEQ ID no. 29):
GGACTCCGGAAGCCAGGTTGGATGTGGCATAAATCCAGGG

35 C-terminal sense strand template DNA sequence (SEQ ID no. 30):
TTCAGTGGCAGTGGGTCTGGGACCGAGTTCACTCTCACAATCAGCA
GTTTGCAGCCTGAAGATTTTCGCCACTTATTTCTGCCATCAGTGGAGT
AGTAACCCGCTCACGTTCGGTGCTGGG

40 5' Primer for C-template (SEQ ID no. 31):
GGCTTCCGGAGTCCCTAGTCGCTTCAGTGGCAGTGGGTCTGGG

3' Primer for C-template (SEQ ID no. 32):
CCGTAGAACGGTCAGCTTGGTCCCAGCACCGAACGTGAGCGG

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Joining site: BspEI